DURHAM
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CITY OF MEDICINE

CITY OF DURHAM | NORTH CAROLINA

Date: April 19, 2016

To: Thomas J. Bonfield, City Manager
Through: W. Bowman Ferguson, Deputy City Manager
From: Donald F. Greeley, Director, Water Management
Subject: Williams Water Treatment Plant Terminal Reservoir Residuals Removal Contract – Construction Contract Award to Bio-Nomic Services, Inc.

Executive Summary:

The Department of Water Management (DWM) opened bids on April 7, 2016 for the Williams Water Treatment Plant (Williams WTP) Terminal Reservoir Residuals Removal Contract. The project consists of removing approximately 100,000 cubic yards of settled material from the Williams Terminal Reservoir. Removal of the settled material will re-establish the full use and capacity of the reservoir and prepare the reservoir for a future project to repair and replace the inner reservoir concrete apron. The Department recommends the contract be awarded to Bio-Nomic Services Inc., the lowest responsive and responsible bidder. Additionally, the Department recommends establishing a contingency fund of approximately 10% for the project.

Recommendations:

The Department recommends City Council:

1. Authorize the City Manager to execute a contract with Bio-Nomic Services, Inc. for the Williams WTP Terminal Reservoir Residuals Removal Contract in the amount of $2,493,960.00.
2. Establish a contingency fund for the contract in the amount of $250,000.00 and
3. Authorize the City Manager to negotiate change orders for the contract provided that the cost of all change orders together with the total project cost does not exceed $2,743,960.00.

Background:

The Williams WTP Terminal Reservoir was constructed in 1915 to provide on-site storage of raw water pumped from Lake Michie and Little River. The treatment facilities are located immediately north of the reservoir, which has been in use for just over 100 years. During this timeframe, the reservoir's capacity has reduced by approximately 35% due to the accumulation of sediment from the raw water and the WTP process backwash residuals.

Removal of the sediment is necessary to regain the lost capacity of the reservoir and prepare for a future project to repair and replace the inner concrete apron around the reservoir. The apron repair/replacement project is scheduled for 2017 – 2018, when the WTP is scheduled to be shut down for the Brown WTP Expansion and Williams WTP Upgrade Project. The sediment removal needs to be completed prior to performing the concrete apron replacement.

Removal of the sediment/residuals will be achieved by dredging the reservoir, dewatering the material removed and transporting the solids/residuals off-site for processing and disposal. The water plant will maintain water treatment operations during the dredging activities. Removal of the reservoir is expected to take one year.

Issues and Analysis:
The bid results are:

Contractor	Total Bid
Bio-Nomic Services, Inc.	$2,493,960.00
Synagro	$2,762,900.00

The Department recommends the City Council award the contract to Bio-Nomic Services, Inc., the lowest responsible and responsive bidder.

Alternatives:
Alternative 1: Do not go forward on the project – This is not recommended. Removal of the sediment is required to complete the repairs and replacement of the reservoir's concrete apron. The pricing is competitive and the City's engineering consultant recommends Bio-Nomic Services, Inc. for selection.

Financial Impact:
Funding for this contract was budgeted for in the Water Facilities Rehabilitation Capital Improvement Project Account. Funds are available in the following accounts.

Williams WTP – Reservoir Solids Removal Construction

	$ 2,493,960.00	4100P002-731000-P0BE9
(contingency)	$ 250,000.00	4100P002-731900-P0BE9
Total	$ 2,743,960.00	

SDBE Summary
There were no SDBE goals for this project but Bio-Nomics Services, Inc. will subcontract to the following certified firm:

Firm	ID	City/State	Amount	% of Contract
Carolina Transport Services	SDBE	Durham, NC	$72.50/hr.	TBD

WORKFORCE STATISTICS

The workforce statistics for Bio-Nomics Services, Inc. are as follows:

Total Workforce	61	
Total Females	3	5%
Total Males	58	95%
Black Males	3	5%
White Males	53	87%

Other Males	2	3%
Black Females	0	0%
White Females	3	8%
Other Females	0	0%